

Reauthorizing ESEA

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A POCKET GUIDE



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Educator Effectiveness

First introduced in 1965, the Elementary and Secondary Education Act (ESEA) has evolved over time, emphasizing education reform priorities that mirror the changing national education policy conversation. The most recent iteration of ESEA, as amended by the No Child Left Behind Act (NCLB), was enacted in 2001. It emphasized improving outcomes for all students regardless of their race, language, or disability, with a strong focus on accountability for teachers, schools, and districts. A decade later, ESEA is again due for reauthorization. This Pocket Guide will assist policymakers and educators as they consider changes to this law—particularly changes related to ensuring a highly effective teacher in every classroom.

The Current Framework for Highly Qualified Teachers and Equitable Teacher Distribution

One of the more notable inclusions in the 2001 reauthorization of ESEA is an expanded State role for ensuring teacher quality through the act's highly qualified teacher (HQT) provision. Title I, Part A of ESEA requires that States ensure that 100 percent of their teachers in core academic subjects (English language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography) are “highly qualified.”

To be a highly qualified teacher (HQT) the following three criteria must be met:

1. The teacher must hold a bachelor's degree.
2. The teacher must have obtained full State certification (through a traditional or alternative route).
3. The teacher must have demonstrated subject-matter expertise in each core academic subject taught (how this is demonstrated can vary, depending, for example, on whether a teacher is new to the profession or is teaching special education, and can include passing a State examination, completing an advanced degree, or holding a college major in the subject taught).

Through the current ESEA Title II, Part A reporting requirements, the U.S. Department of Education collects and reports on State progress in meeting the 100 percent HQT goal. Between 2003–04 (when HQT data were first collected) and 2006–07 (when HQT data were last collected), the percentage of U.S. classrooms taught by HQTs climbed from 87 percent to 95 percent. Still, only one State (North Dakota) reached 100 percent (U.S. Department of Education, 2009). States receive funding through Title II to support implementation of the strategies included in their HQT plans, but those funds are often already earmarked for class size reduction efforts and professional development activities that may not directly align with the recruitment and retention efforts outlined in State plans.

During this timeframe, students in high-poverty high schools had *less* rather than *greater* access to HQTs in 48 States. (This was also true for elementary schools in 38 States.) In one State, 89 percent of classrooms in low-poverty secondary schools were taught by HQTs, compared with only 63 percent in high-poverty secondary schools. Data from the most recent Schools and Staffing Survey (see figure 1) and current research also demonstrate that, although there are many dedicated and highly talented teachers in America's public schools, systematic inequality remains in the distribution of teachers; minority and high-poverty students are disproportionately taught by teachers who have less experience and fewer qualifications (Clotfelter, Ladd, & Vigdor, 2005; Lankford, Loeb, & Wyckoff, 2002).

The lack of measurable progress over time in this area is significant because in addition to the HQT provisions, NCLB also required States to take steps to ensure that students from low-income or minority backgrounds are not disproportionately taught by inexperienced or unqualified teachers (Title I, Part A, section 1111[b]8[C]).

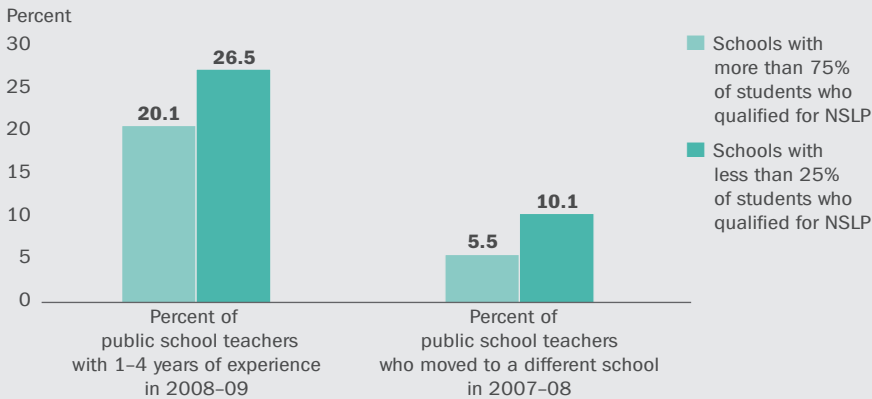
Beginning in July 2006, all 50 States, the District of Columbia, and Puerto Rico submitted a Revised State Plan for Highly Qualified Teachers. These plans included analysis of data identifying teachers who do not meet the HQT requirements, steps that local school districts will take to quickly address

non-HQTs, the types of assistance the State will provide districts in achieving these steps, and the actions States will take if their districts do not meet the HQT requirements.

The Revised State Plans can be found at: <http://www2.ed.gov/programs/teacherqual/hqtplans/index.html>

For a detailed report on the implementation of NCLB, including State and district strategies and actions for recruiting and retaining HQTs and States' and districts' perceptions of challenges and weaknesses of the legislation, please visit: <http://www2.ed.gov/rschstat/eval/teaching/nclb-final/report.pdf> (U.S. Department of Education, 2009).

Figure 1. The inequitable levels of teacher experience and teacher mobility in schools serving high and low numbers of students approved for National School Lunch Program (NSLP)



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," Teacher Follow-up Survey (TFS), "Current and Former Teacher Data Files," 2008-09.

Other Major Federal Programs Related to Educator Effectiveness

Race to the Top (RTT) – The RTT fund is the largest-ever Federal competitive school reform grant, investing \$4.35 billion in a dozen States that, through past achievements and future plans, are leading the way in: a) adopting internationally benchmarked standards and assessments that prepare students for success in college and the workplace; b) recruiting, developing, retaining, and rewarding effective teachers and principals, especially where they are most needed; c) building data systems that measure student success and inform teachers and principals about how they can improve instruction; and d) turning around the lowest achieving schools. All but 4 States applied, but only 12 were funded.

A consequence of the program is that, to make their applications more competitive, many States passed legislation requiring changes to their teacher evaluation systems, including the incorporation of value-added and other measures of student growth into teachers' evaluations. These changes are now being developed and implemented in school districts across the country. While there is no evidence to date that reforms of this nature will produce the intended results for students, they offer an opportunity for education researchers to assess impact and for policymakers to consider the effectiveness of various innovations aimed at improving student achievement.

Teacher Incentive Fund (TIF) – The TIF program was created in 2006 to provide grants to States and school districts in support of performance-based compensation programs for teachers and principals in high-need schools. The goal of the fund is to base educators' salaries more on their effectiveness and teaching skills and less on their experience and advanced education credits. To qualify for a TIF grant, applicants must agree to establish a compensation system that provides teachers and principals in high-need schools with differentiated levels of compensation based on student achievement gains as well as classroom evaluations. Since the program was first introduced in 2006, 96 schools, districts, States, and organizations have been awarded TIF grants.

School Improvement Grants (SIG) – Section 1003(g) of ESEA, Title I provides Federal funding to States to distribute SIGs to their persistently lowest achieving schools. The American Recovery and Reinvestment Act (ARRA) of 2009 added significant resources to the SIG program. The goal was to facilitate rapid improvement in these schools through one of four options: school turnaround, transformation, restart, or closure. Each of the four options includes different requirements with regard to replacing teachers and principals and implementing strategies designed to improve teacher and leader effectiveness.

What We Have Learned Over the Past Decade

In the decade since the No Child Left Behind Act of 2001 was introduced, a great deal has been learned from research and experience about policies for ensuring that all children are taught by high-quality teachers.

HQT represents only one definition of “quality teacher,” and has limitations.

The implementation of NCLB has demonstrated that HQT is only a minimum bar that very few view as a genuine indicator of a teacher’s abilities. Having a bachelor’s degree, certification, and content knowledge may be necessary but insufficient qualities for today’s classroom teachers. Moreover, research by American Institutes for Research (AIR) found that State HQT policy varies, and in some cases may set “highly qualified” standards too low (U.S. Department of Education, 2009). For these reasons, the field has begun to use the term “highly effective teacher” (HET). HET intends to capture not just the “inputs” but also the classroom “outcomes” that are the results of teachers’ skills and knowledge. In other words, while a teacher’s degree and classroom experience may be important, what really matters is whether that teacher possesses the ability—which may include knowledge, communication skills, motivation, and other traits—to increase student learning. One definition of a HET is found in the RTT application (see below); however, there is no consensus yet within the policy and research communities regarding an appropriate definition of a HET or whether the Federal government should provide a definition to States.

The Federal Race to the Top Application for Initial Funding (CFDA Number 84.395A) defined a **“highly effective teacher”** as “a teacher whose students achieve high rates (e.g., one and one-half grade levels in an academic year) of student growth.” The application defined an **“effective teacher”** as “a teacher whose students achieve acceptable rates (e.g., at least one grade level in an academic year) of student growth.” In both cases the application stipulated, “A method for determining if a teacher is effective must include multiple measures, and effectiveness must be evaluated, in significant part, on the basis of student growth. Supplemental measures may include, for example,

multiple observation-based assessments of teacher performance” (U.S. Department of Education, 2010, p. 8). For additional information on Federal education programs promoting a shift from “highly qualified” to “measures of effectiveness” please see the sidebar on p. 4.

Teachers matter. Research on the critical contributions teachers make to student learning has also evolved. We can now say with even greater confidence that the quality of teachers is the most important school-level factor affecting student achievement (Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004). A series of reports by McKinsey & Company identified teacher quality as the factor that sets the world’s top-performing school systems apart from the others, noting that top-performing schools draw far more teachers from the top third of their college class than do most schools in the United States (Auguste, Kihn, & Miller, 2010; Barber & Mourshed, 2007). Certain high-need subjects, such as science and mathematics, are also persistently difficult to staff (Ingersoll & Perda, 2009).

Current teacher evaluation systems are widely viewed as meaningless and ineffective. It has become apparent in recent years that many teacher evaluation systems are ineffective, failing to include meaningful measures and involving minimal scope for teacher growth and few consequences for poor ratings (Brandt, Mathers, Oliva, Brown-Sims, & Hess, 2007; Goe, Bell, & Little, 2008). In many school systems, nearly all teachers are rated “satisfactory” or “excellent,” even as many of their students are failing to graduate from high school. The New Teacher Project’s report *The Widget Effect* drew national attention to the idea that current teacher evaluation systems do not necessarily differentiate between different levels of teacher effectiveness, and do not result in meaningful opportunities for professional learning and growth (Weisberg, Sexton, Mulhern, & Keeling, 2009).

Multiple measures exist to assess teacher effectiveness. There is consensus among leading researchers that however teacher effectiveness is defined, multiple measures of effectiveness should be used to accurately assess performance (Baker et al., 2010). The National Comprehensive Center for Teacher Quality (TQ Center) housed at AIR recommends, in its 2009 *Practical*

Guide to Measuring Teacher Effectiveness, that education leaders “resist pressures to reduce the definition of teacher effectiveness to a single score obtained on an observation instrument or through a student growth measure” (Little, Goe, & Bell, 2009, p. 17). Scholars have confirmed that measuring effectiveness in an activity as complex as teaching is no simple endeavor, both theoretically and practically. Even if high-quality data systems were in place in districts nationwide, student test scores cannot fully capture a teacher’s contributions (and many subjects taught by teachers are not tested) and can lead to unintended consequences, such as “teaching to the test” or teachers inadvertently ignoring the needs of students sure to fail or sure to pass the exam. To the extent that test scores are used, it has become apparent that growth in test scores between the beginning and end of the school year is a better indicator of teacher effectiveness than test scores on a single occasion. Although scholars agree that it is limited in many ways, one form of student growth that is emerging as “the best option available” is value-added measures (VAMs), which provide a more complex, but often more accurate, measure of the teacher’s impact on student growth over time, potentially accounting for a number of factors such as poverty, ethnicity, and language ability that are often correlated with a teacher’s ability to progress students’ learning over the year. Regardless of how sophisticated the field of measuring student growth becomes, without the inclusion of additional measures that shed light on instructional strategies and the myriad ways in which teachers might contribute to school-wide achievement, teacher evaluation systems will fall short of their potential to improve teaching and learning.

There is no silver bullet for improving teacher quality and effectiveness—multiple policy components, addressed in a cohesive and integrated manner, are needed to improve teacher recruitment, retention, and development. In many cases, States and districts have viewed the recruitment of HQTs as an issue of compliance. While working to make sure that their books reflected the required qualifications, the overriding goal of improving the quality of classroom instruction was sometimes lost. New legislation should incentivize and inspire improvements in the quality of the nation’s teachers that are evident both on

paper and in the classroom. AIR authors Laine, Behrstock-Sherratt, and Lasagna (2011) emphasize the need to address all components of teacher quality policy, including:

Preparation – Teacher preparation programs should be selective in their admissions process, responsive to local needs for teachers in certain subjects, and effective in teaching new teachers the pedagogical skills needed to be strong teachers.

Recruitment – School districts and States must actively increase the number of talented individuals interested in joining the teaching profession, and then strategically and proactively work to attract them to schools where they are needed.

Hiring – Professional teacher hiring processes must operate on an early hiring timeline to attract effective teachers, and must involve a rich exchange of information to facilitate strong matches between teachers and schools.

Induction and mentoring – High-quality induction and mentoring should be provided to all new teachers so that they can be effective from day one.

Professional development – Ongoing opportunities to grow on the job should be available; these should be differentiated to meet teachers' needs and job-embedded so that they are meaningful.

Working conditions – Classroom discipline, school facilities, and workloads should be reasonable for teachers, and school leaders must create positive, team-oriented school cultures to improve student achievement and retain effective teachers.

Compensation – Teachers should be compensated in a manner that will attract the best and brightest and be competitive with other professions.

Performance management – Teacher evaluations should be fair and meaningful, involving timely and clear feedback that fosters growth and that rewards or sanctions based on results.

School leadership matters. Studies have shown that the quality of school leadership is second only to the quality of teachers in affecting student achievement (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Moreover, school leadership and support have been consistently cited as key factors in surveys of teachers leaving or planning to leave the classroom and key factors in successful reform efforts (Ingersoll & Strong, 2011). The need to recruit, retain, and develop highly effective school principals and other instructional leaders must be addressed alongside the need to recruit, retain, and develop highly effective teachers. In addition, as the most common evaluators of teacher effectiveness, school principals and assistant principals must be trained to conduct fair and accurate teacher evaluations if we are to trust their determination of who is highly effective and who is not.

Moving Forward: Key Considerations for Reauthorization

The research is clear that teachers matter when it comes to raising student achievement—but that it is more than just their qualifications that makes the difference. The reauthorization of ESEA should look beyond teacher qualifications, to measures of a teacher’s ability to promote student learning. Unfortunately, there is no consensus on the precise mix of skills, knowledge, and disposition that make for an effective teacher. Giving States flexibility to resolve this issue with Federal guidance, benchmarks for outcomes, and significant national investment in the capacity of developers and technical assistance providers might be the best formula for a new policy. In moving forward with the reauthorization of ESEA, some key considerations include the following:

1. **Emphasize the need for multiple measures of teacher effectiveness.**
If States and districts are going to be required to evaluate teachers’ effectiveness, the research is clear that multiple measures are needed if teachers (and others) are to trust the results. Moreover, data on teacher effectiveness must be collected by highly trained evaluators, and the push for improved data systems to accurately track information about teachers’ effectiveness must remain a priority.

2. **Align ESEA Title II funds with teacher effectiveness requirements.**

Whereas NCLB was often criticized as an “unfunded mandate,” the reauthorization of ESEA should align the funds available through Title II and other sources with any teacher effectiveness requirements. These resources should help build systems for meaningfully evaluating teacher effectiveness and should support policies that reward effective teachers and increase their numbers. At the same time, the policy conversation should balance the imperative to use evaluation results to fire, pay, or otherwise reward and sanction teachers with the importance of using evaluation results to continually develop teachers’ skills and expertise.

3. **Include requirements for effective school leaders as well as teachers.**

Securing effective principals for all students must be a goal alongside securing effective teachers for all students. School leaders must be able to create and gain support for a school vision, use data, foster a school atmosphere conducive to learning, work with the wider community, and, most importantly, serve as instructional leaders to their teachers. Districts and States around the country are beginning to rethink their approaches to assessing principal effectiveness, although these systems tend not to be as far along in their development as their approaches to assessing teacher effectiveness.

4. **Focus on the equitable distribution of effective teachers.** Children from at-risk backgrounds need the most effective teachers, but typically get the less effective ones. Although the ESEA requires States to develop a plan to address this issue, the reauthorization of ESEA could go further, withholding Federal funding from districts that assign teachers inequitably or recognizing and rewarding districts that do address teacher distribution effectively. Prioritizing teacher distribution in the ESEA reauthorization will help to make sure this critical issue does not get pushed aside as States and districts struggle to define and measure teacher effectiveness.

5. **Monitor teacher effectiveness reforms.** The reauthorized ESEA should include provisions to monitor reforms that are required to improve teacher effectiveness, such as new teacher evaluation systems. Policy is currently ahead of the research on measuring teacher effectiveness. Because little research literature exists to guide States and districts, it is important that the education community and the public learn from all successes and challenges along the way about what works in teacher effectiveness. This information should be shared widely, and school districts and States should be encouraged to modify their systems as new knowledge emerges. Provisions should also be in place to monitor States' and districts' work to rectify shortages of effective teachers where they exist.

Keep a focus on genuine and comprehensive reforms to all aspects

of teacher quality. States and districts should be encouraged to move away from seeking a “silver bullet” solution to teacher effectiveness and instead should be encouraged to address all critical components of an effective teacher talent management system (e.g., professional development, compensation, working conditions, recruitment). Research on the incoming cohort of teachers (from Generation Y) gives reason for some optimism, in that more than two-thirds of these new teachers intend to stay in the classroom for more than 10 years (see figure 2). But for those who plan to leave, it is not one but myriad factors that would change their mind about teaching as a profession (see figure 3) (Coggshall, Ott, Behrstock, & Lasagna, 2009; Public Agenda, 2010). By adopting best practices for each of these teacher quality policy areas, States and districts can promote teaching as a highly attractive profession that talented individuals will be interested in joining today, tomorrow, and in the long term.

Figure 2. What is your best estimate for how many more years you'll be in the classroom? (Gen Y)

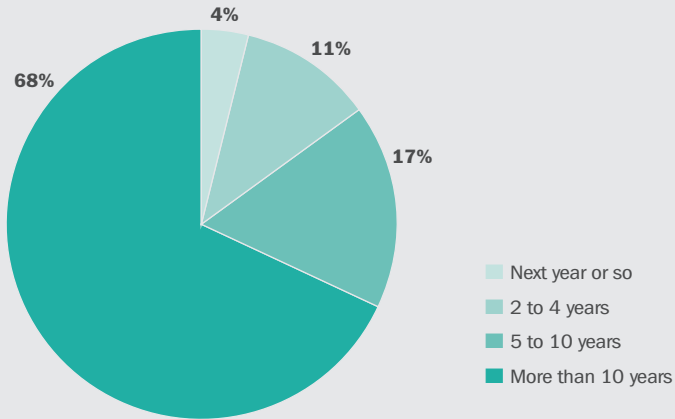
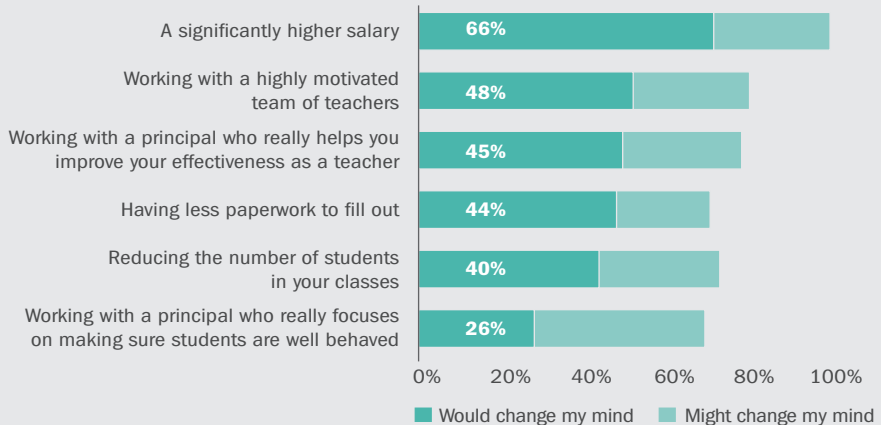


Figure 3. What would change the minds of Gen Y teachers who do not plan to teach for the long haul?



As Congress grapples with the difficult—but critical—task of ensuring that all classrooms are staffed by highly effective teachers, the following **key questions** should guide the conversation:

- ▲ What measures of teacher effectiveness should be considered?

- ▲ In defining an “effective teacher,” how much should students’ test scores factor into the definition? What are the pros and cons of requiring that student test scores be incorporated? What are the pros and cons of requiring that student test score growth be incorporated?

- ▲ Should “effective teacher” and “effective principal” be defined at the national level, or should the definition depend on the State or local context? What context-specific factors might affect what it means for a teacher or principal to be effective?

- ▲ How should the need to define and measure “effective teachers” and “effective principals” be balanced by the more pressing need to develop and support strategies to recruit and retain those effective teachers and leaders?

- ▲ What is the appropriate balance between ensuring accurate assessments of effectiveness through more sophisticated evaluation systems and maintaining a low burden on principals’ time and school resources?

- ▲ Which components of a comprehensive teacher talent management system should ESEA require by law, which should be supported through grants, and which should simply be recommended as research-based best practice?

- ▲ What structures can support districts and States in learning about existing standards, systems, and strategies for improving teacher effectiveness so that they do not duplicate efforts?

The result of significant bipartisan collaboration, NCLB was one of the most substantive changes in Federal education law since the initial ESEA legislation was passed in 1965. While the law arguably had a number of flaws, it led to considerable improvements in educators' and policymakers' access to and use of data and research. In particular, the provisions requiring States to collect and report on data about teachers—imperfect as they may be—have highlighted important, longstanding inequities in the U.S. education system that were often historically overlooked. For example, according to TQ Center analyses, the number of teachers on waivers and renewable emergency licenses has declined significantly, and when they do appear on the rolls, they now tend to be aligned with ESEA-approved alternate route provisions (National Comprehensive Center for Teacher Quality, 2009). NCLB-inspired data systems can serve as the foundation for the reform of State and local educator evaluation systems, and have the capacity to enhance instruction in classrooms across the country so that teachers can be sure all students are learning what they need to know to succeed in the workplace and in their lives. The next reauthorization of ESEA has the capacity to take this to the next level by ensuring that the very smartest, most dedicated, and most highly effective teachers are staffing each and every classroom.

For more information on educator effectiveness research and policy, visit <http://www.air.org/focus-area/education/?id=135>

References

- Auguste, B., Kihn, P., & Miller, M. (2010). *Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching*. London: McKinsey & Company. Retrieved June 7, 2011, from http://www.mckinsey.com/clientservice/Social_Sector/our_practices/Education/Knowledge_Highlights/~/_media/Reports/SSO/Closing_the_talent_gap.ashx
- Baker, E. L., Barton, P. E., Darling-Hammond, L., Haertel, E., Ladd, H. F., Linn, et al. (2010). *Problems with the use of student test scores to evaluate teachers* (Briefing Paper 278). Washington, DC: Economic Policy Institute. Retrieved June 7, 2011, from http://epi.3cdn.net/724cd9a1eb91c40ff0_hwm6ij90.pdf
- Barber, M., & Mourshed, M. (2007). *How the world's best-performing school systems come out on top*. London: McKinsey & Company. Retrieved June 7, 2011, from http://www.mckinsey.com/App_Media/Reports/SSO/Worlds_School_Systems_Final.pdf
- Brandt, C., Mathers, C., Oliva, M., Brown-Sims, M., & Hess, J. (2007). *Examining district guidance to schools on teacher evaluation policies in the Midwest Region* (Issues & answers report, REL 2007–No. 030). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved June 7, 2011, from http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2007030_sum.pdf
- Clotfelter, C., Ladd, H. F., & Vigdor, J. L. (2005). Who teaches whom? Race and the distribution of novice teachers. *Economics of Education Review*, 24(4), 377–392.
- Coggeshall, J., Ott, A., Behrstock, E., & Lasagna, M. (2009). *Retaining teacher talent: The view from Generation Y*. Naperville, IL: Learning Point Associates & Public Agenda. Retrieved June 7, 2011, from <http://www.learningpt.org/expertise/educatorquality/genY/SupportingTeacherEffectiveness/Gen%20Y%20report.pdf>
- Goe, L., Bell, C., & Little, O. (2008). *Approaches to evaluating teacher effectiveness: A research synthesis*. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved June 7, 2011, from <http://www.tqsource.org/publications/EvaluatingTeachEffectiveness.pdf>
- Ingersoll, R., & Perda, D. (2009). *The mathematics and science teacher shortage: Fact and myth* (CPRE Research Report #RR-62). Philadelphia: Consortium for Policy Research in Education. Retrieved June 7, 2011, from http://www.cpre.org/images/stories/cpre_pdfs/math%20science%20shortage%20paper%20march%202009%20final.pdf
- Ingersoll, R., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Education Research*, 81(2), 201–233.
- Laine, S., Behrstock-Sherratt, E., & Lasagna, M. (2011). *Improving teacher quality: A guide for education leaders*. San Francisco: Jossey-Bass.
- Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban schools. *Educational Evaluation and Policy Analysis*, 24(1), 37–62.
- Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning* (Review of Research). New York: The Wallace Foundation. Retrieved June 7, 2011, from <http://www.wallacefoundation.org/SiteCollectionDocuments/WF/Knowledge%20Center/Attachments/PDF/ReviewofResearch-LearningFromLeadership.pdf>

- Little, O., Goe, L., & Bell, C. (2009). *A practical guide to evaluating teacher effectiveness*. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved June 7, 2011, from <http://www.tqsource.org/publications/practicalGuide.pdf>
- National Comprehensive Center for Teacher Quality. (2008). *Highly qualified teachers in the United States: Where are we now?* Washington, DC: Author. Retrieved June 7, 2011, from <http://www.tqsource.org/publications/HQTinUS.pdf>
- Public Agenda. (2010). *Retaining teacher talent survey of teachers: Full survey data*. New York: Author. Retrieved June 7, 2011, from <http://www.learningpt.org/expertise/educatorquality/genY/FullSurveyData.pdf>
- Rivkin, S., Hanushek, E., and Kain, J. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417–458.
- Rockoff, J. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, 94(2), 247–252.
- U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. (2009). *State and local implementation of the No Child Left Behind Act, volume VIII—teacher quality under NCLB: Final report*. Washington, DC: Author. Retrieved June 7, 2011, from <http://www2.ed.gov/rschstat/eval/teaching/nclb-final/report.pdf>
- U.S. Department of Education. (2010). *Race to the Top application for initial funding* (CFDA Number: 84.395A). Washington, DC: Author. Retrieved June 7, 2011, from <http://www2.ed.gov/programs/racetothetop/application.doc>
- Weisberg, D., Sexton, S., Mulhern, J., & Keeling, D. (2009). *The widget effect: Our national failure to acknowledge and act on differences in teacher effectiveness*. Brooklyn, NY: The New Teacher Project. Retrieved June 7, 2011, from <http://widgeteffect.org/downloads/TheWidgetEffect.pdf>



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